

REMARKS

Claims 12-26 are pending in the application. This Amendment amends claims 12-17, 19-20, and 23-25. Claims 12 and 19 are independent.

The Claimed Invention

An exemplary embodiment of the present invention as recited by, for example, independent claim 12, includes a method for operating a defroster heater that defrosts an evaporator of a refrigeration device. The method includes recording a voltage amplitude of a supply voltage for the defroster heater, generating a pulsed supply current for the defroster heater, a pulse-duty ratio of the pulsed supply current based upon the recorded voltage amplitude, and supplying the defroster heater with the pulsed supply current, for a fixed heating interval.

Ice may form on an evaporator of a refrigerator. This ice has an insulating effect, so that exchange of cold between the evaporator and the cooling chamber is made difficult. For this reason, the ice must be thawed from time to time, for which purpose many refrigeration appliances, in particular so-called frost-free appliances, have defroster heating. (Page 1, lines 10-17).

Conventionally, such defroster heating is controlled, for example, by ice sensors such that the defrosting process is performed if a recorded quantity of ice exceeds a limit value, and discontinued if no more ice is detected. However, such ice sensors may be expensive and insufficiently reliable. Also, a large number of ice sensors may be necessary to reliably assess the total quantity of ice since the thickness of the ice can vary from place to place. Some conventional devices periodically control defrosting procedures with a fixed preset duration with the assistance of a time switch element, which generally is easy, cost-effective, and reliable. (Page 1, lines 19-31-26).

In stark contrast to the conventional devices, the present invention controls a defrost heater with a pulsed supply current having a pulse-duty ratio that is based upon a amplitude of the defroster heater supply voltage. In this manner, the performance of the

defroster heater may be appropriately adjusted in response to variances in the supply voltage.

The Alsenz Reference

The October 2, 2007, Office Action rejected claims 12-14, 18-21, and 26 under 35 U.S.C. § 102(b) and claims 15-17 and 22-25 under 35 U.S.C. § 103(a) as allegedly being unpatentable over the Alsenz reference (U.S. Pat. No. 4,531,376). Applicants respectfully traverse these rejections.

In particular, the Alsenz reference does not teach or suggest the features of the claimed invention including: recording a voltage amplitude of a supply voltage for a defroster heater that defrosts an evaporator of a refrigerator, generating a pulsed supply current for the defroster heater, a pulse-duty ratio of the pulsed supply current based upon the recorded voltage amplitude, and supplying the defroster heater with the pulsed supply current, for a fixed heating interval.

CONCLUSION

In view of the above, entry of the present Amendment and allowance of Claims 12-26 are respectfully requested. If the Examiner has any questions regarding this amendment, the Examiner is requested to contact the undersigned. If an extension of time for this paper is required, petition for extension is herewith made.

Respectfully submitted,



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